

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Application Number : (unassigned)  
Applicant : Bishwajit Nag et al.  
Filed : March 25, 2004  
Tech Cntr/AU : (unassigned)  
Examiner : (unassigned)  
Entitled : Novel Heterocyclic Analogs of Diphenylethylene  
Compounds  
  
Attorney Reference : 083712-0308878  
Customer Number : 00909

**MAIL STOP PATENT APPLICATION**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, Virginia 22313-1450

**INFORMATION DISCLOSURE STATEMENT**

Sir:

Pursuant to 37 CFR §1.56, the attention of the Patent and Trademark Office is hereby directed to the reference(s) listed on the attached PTO-1449. The listed references were cited by or submitted to the U.S. Patent & Trademark Office in parent Serial No. 09/843,167, filed April 27, 2001, which is relied upon for an earlier filing date under 35 U.S.C. §120, and therefore, pursuant to 37 C.F.R. §1.98(d), copies of the references are not attached hereto.

This application is one of a series of related applications, identified in the attached Appendix, which are directed to related technical subject matter. The identification of the related U.S. Patent Applications is not to be construed as a waiver of secrecy for those applications, now or upon issuance of the present application as a patent. The Examiner is respectfully requested to consider the cited applications and the art cited therein during examination.

This Information Disclosure Statement is being filed (a) within three months of the U.S. filing date of this non-CPA application, OR (b) before the mailing date of the first Office Action on the merits in the present application. No certification or fee is required.

It is respectfully requested that this information be expressly considered during the prosecution of this application, and that the reference(s) be made of record therein and appear among the "References Cited" on any patent to issue therefrom. The Examiner is further respectfully requested to return of a copy of the enclosed Form PTO-1449 with the Examiner's initials in the left column.

The examination and allowance of this Application is respectfully requested.

Respectfully Submitted,

PILLSBURY WINTHROP LLP

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Customer No. 00909

Date: March 25, 2004  
Attachments: Appendix  
PTO Form 1449

APPENDIX

Examiner's Initials	Publication No.	Application No.	Filing Date	Enclosed
	2002-0025975	09/785,554	February 20, 2001	<input type="checkbox"/> Specification <input type="checkbox"/> Drawings <input checked="" type="checkbox"/> Other: Publication
	2003-0181494	10/265,902	October 8, 2002	<input type="checkbox"/> Specification <input type="checkbox"/> Drawings <input checked="" type="checkbox"/> Other: Publication
		10/690,844	23 October 2003	<input checked="" type="checkbox"/> Specification <input type="checkbox"/> Drawings <input type="checkbox"/> Other:

The Examiner's initials indicates he/she has considered the cited application relative to the subject application.

**DO NOT PRINT** the above information on the patent  
which results from the subject application.

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**INFORMATION DISCLOSURE STATEMENT  
 BY APPLICANT**

Applicants: Bishwajit Nag et al.

Application Serial No. (unassigned)

Filing Date: March 25, 2004

Date: March 25, 2004 Page 1 of 4

Examiner: (unassigned) Group Art Unit: (unassigned)

**U.S. PATENT DOCUMENTS**

Examiner's Initials*		Document Number	Date MM/YYYY	Name (Family Name of First Inventor)	Class	Sub Class	Filing Date (if appropriate)
	AR	3,609,183	Sep 1971	DeWald et al.			
	BR	3,683,009	Aug 1972	Middleton			
	CR	3,846,398	Nov 1974	Hirschmann et al.			
	DR	4,092,335	May 1978	Gruszecki et al.			
	ER	4,217,366	Aug 1980	Kikumoto et al.			
	FR	4,271,186	Jun 1981	Forster et al.			
	GR	4,284,637	Aug 1981	Kikumoto et al.			
	HR	4,297,429	Nov 1981	Kanada et al.			
	IR	4,310,534	Jan 1982	Kikumoto et al.			
	JR	4,312,855	Jan 1982	Grand			
	KR	4,326,055	Apr 1982	Loeliger			
	LR	4,716,905	Jan 1988	Schmued			
	MR	4,866,086	Sep 1989	Boyle et al.			
	NR	4,929,635	May 1990	Coquelet et al.			
	OR	4,940,707	Jul 1990	Klaus et al.			
	PR	5,087,637	Feb 1992	Janssen et al.			
	QR	5,158,966	Oct 1992	Lafferty et al.			
	RR	5,162,337	Nov 1992	Elbrecht et al.			
	SR	5,171,753	Dec 1992	Munson, Jr. et al.			

**FOREIGN PATENT DOCUMENTS**

		Document Number	Date MM/YYYY	Country	Inventor Name	English Abstract		Translation Readily Available	
						Encl	No	Encl	No
	TR	32128	Jun 1981	Europe					
	UR								

**OTHER (Including in this order Author, Title, Periodical Name, Date, Pertinent Pages, etc.)**

	VR	Sohda et al. "Antiulcer Activity of 5-benzylthiazolidine-2,4-dione derivatives" <i>Chem. Pharm. Bull.</i> 31:2 (1983) 560-9.			
	WR	Giles et al. "Regiospecific Reduction of 5-benzylidene-2,4-thiazolidinediones and 4-oxo-2-thiazolidinethiones Using Lithium Borohydride in Pyridine and Tetrahydrofuran" <i>Tetrahedron</i> 56:26 (2000) 4531-4537.			
	XR	Myaoka et al. "Preparation of 2,4-Dioxo-1,2,3,4-Tetrahydroquinazoline Derivatives Having Blood Sugar-Lowering and Aldose Reductase-Inhibiting Activity" <i>Japan Kokai Tokkyo Koho</i> (1996).			
	YR	Hulin et al. "Novel Thiazolidone-2,4-Diones as Patent Euglycemic Agents" <i>J. Med. Chem.</i> 35:10 (1992) 1853-64.			
	ZR	Petit et al. "Isolation, Structure, Synthesis and Antimitotic Properties of Combretastatins B-3 and B-4 from Combretum Caffrum" <i>Journal of Natural Products</i> 51:3 (1988) 517-527.			
	AAR	Green, Richard H. "Syntheses of Differanisole A" <i>Tetrahedron Letters</i> 38:26 (1997) 4697-4700.			

Examiner Date Considered:

\*EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

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Date: March 25, 2004      Page 2 of 4

**U.S. PATENT DOCUMENTS**

Examiner's Initials*	Document Number	Date MM/YYYY	Name (Family Name of First Inventor)	Class	Sub Class	Filing Date (if appropriate)
	BBR	5,189,056	Feb 1993	Orlando et al.		
	CCR	5,246,936	Sep 1993	Treacy et al.		
	DDR	5,250,562	Oct 1993	Klaus et al.		
	EER	5,314,693	May 1994	Suga		
	FFR	5,378,705	Jan 1995	Klaus et al.		
	GGR	5,409,953	Apr 1995	Pettit et al.		
	HHR	5,430,062	Jul 1995	Cushman et al.		
	IIR	5,494,932	Feb 1996	Cardin et al.		
	JJR	5,521,160	May 1996	Chucholowski et al.		
	KKR	5,525,632	Jun 1996	Obsumi et al.		
	LLR	5,532,129	Jul 1996	Heller		
	MMR	5,559,151	Sep 1996	Adorante et al.		
	NNR	5,565,191	Oct 1996	Raspanti		
	OOR	5,565,322	Oct 1996	Heller		
	PPR	5,569,786	Oct 1996	Pettit et al.		
	QQR	5,583,128	Dec 1996	Bhatnagar		

**FOREIGN PATENT DOCUMENTS**

Document Number	Date MM/YYYY	Country	Inventor Name	English Abstract	Translation Readily Available
				Encl	No
RRR					

**OTHER (Including in this order Author, Title, Periodical Name, Date, Pertinent Pages, etc.)**

SSR	Reddy et al. "From Styrenes to Enantipure $\alpha$ -Arylglycines in Two Steps" <i>J. Am. Chem. Soc.</i> 120 (1998) 1207-1217.				
TTR	Momose et al. "Studies on Antidiabetic Agents. X. <sup>1</sup> ) Synthesis and Biological Activities of Pioglitazone and Related Compounds" <i>Chem. Pharm. Bull.</i> 39(6) (1991) 1440 - 1445.				
UUR	Cantello et al. "[ $\omega$ -(Heterocyclamino)alkoxy]benzyl]-2,4-thiazolidinediones as Potent Antihyperglycemic Agents" <i>J. Med. Chem.</i> 37 (1994) 3977 - 3985.				
VVR	Sohda et al. "Studies on Antidiabetic Agents. XII. <sup>1</sup> ) Synthesis and Activity of the Metabolites of ( $\pm$ )-5-[p-[2-(5-Ethyl-2-pyridyl)ethoxy]benzyl]-2,4-thiazolidinedione (Pioglitazone)" <i>Chem. Pharm. Bull.</i> 43(12) (1995) 2168 - 2172.				
WWR	Willson et al. "The Structure-Activity Relationship between Peroxisome Proliferator-Activated Receptor $\gamma$ Agonism and the Antihyperglycemic Activity of Thiazolidinediones" <i>J. Med. Chem.</i> 39 (1996) 665 - 668.				
XXR	Tanis et al. "Synthesis and Biological Activity of Metabolites of the Antidiabetic; Antihyperglycemic Agent Pioglitazone" <i>J. Med. Chem.</i> 39 (1996) 5053 - 5063.				
YYR	Shinkai et al. "Isoxazolidine-3,5-dione and Noncyclic 1,3-Dicarbonyl Compounds as Hypoglycemic Agents" <i>J. Med. Chem.</i> 41 (1998) 1927 - 1933.				
ZZR	Lohray et al. "Novel Euglycemic and Hypolipidemic Agents" <i>J. Med. Chem.</i> 41(1998)1619-1630.				
AAAR	Reddy et al. "Novel Antidiabetic and Hypolipidemic Agents. 5. Hydroxyl versus Benzyloxy Containing Chroman Derivatives" <i>J. Med. Chem.</i> 42 (1999) 3265 - 3278.				

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Date: March 25, 2004 Page 3 of 4

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Examiner's Initials*	Document Number	Date MM/YYYY	Name (Family Name of First Inventor)	Class	Sub Class	Filing Date (if appropriate)
	BBBR 5,589,506	Dec 1996	Hashimoto et al.			
	CCCR 5,674,906	Oct 1997	Hatanaka et al.			
	DDDR 5,672,625	Sep 1997	Cardin et al.			
	EEER 5,705,530	Jan 1998	Adorante et al.			
	FFFR 5,716,928	Feb 1998	Benet et al.			
	GGGR 5,731,353	Mar 1998	Ohsumi et al.			
	HHHR 5,733,909	Mar 1998	Black et al.			
	IIIR 5,767,268	Jun 1998	Chucholowski et al.			
	JJJR 5,770,620	Jun 1998	Mjalli et al.			
	KKKR 5,827,898	Oct 1998	Khandwala et al.			
	LLLR 5,972,973	Oct 1999	Whitcomb			
	MMMR 5,985,884	Nov 1999	Lohray et al.			
	NNNR 5,990,139	Nov 1999	Yano et al.			
	OOOR 6,008,237	Dec 1999	Sahoo et al.			
	PPPR 6,011,031	Jan 2000	Lohray et al.			
	QQQR 6,011,036	Jan 2000	Lohray et al.			
	RRRR 6,030,973	Feb 2000	Lohray et al.			

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					Encl	No	Encl	No
	SSSR							
	TTTR							

**OTHER (Including in this order Author, Title, Periodical Name, Date, Pertinent Pages, etc.)**

UUUR	Turnbow MA, Smith LK, Garner CW. The oxazolidinedione CP-92,768-2 partially protects insulin receptor substrate-1 from dexamethasone down-regulation in 3T3-L1 adipocytes. Endocrinology. 1995 Apr;136(4):1450-8.			
VVVR	Yoshioka T, Fujita T, Kanai T, Aizawa Y, Kurumada T, Hasegawa K, Horikoshi H. Studies on hindered phenols and analogues. 1. Hypolipidemic and hypoglycemic agents with ability to inhibit lipid peroxidation. J Med Chem. 1989 Feb;32(2):421-8.			
WWWV	Zask A, Jirkovsky I, Nowicki JW, McCaleb ML. Synthesis and antihyperglycemic activity of novel 5-(naphthalenylsulfonyl)-2,4-thiazolidinediones. J Med Chem. 33:5 (1990) 1418-23.			
XXXR	Sohda T, Mizuno K, Momose Y, Ikeda H, Fujita T, Meguro K. Studies on antidiabetic agents. 11. Novel thiazolidinedione derivatives as potent hypoglycemic and hypolipidemic agents. J Med Chem. 1992 Jul 10;35(14):2617-26.			
YYR	Hulin B, Newton LS, Lewis DM, Genereux PE, Gibbs EM, Clark DA. Hypoglycemic activity of a series of alpha-alkylthio and alpha-alkoxy carboxylic acids related to ciglitazone. J Med Chem. 1996 Sep 27;39(20):3897-907.			

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	ZZZR	6,034,110	Nagpal et al.			
	AAAAAR	6,046,202	Antonucci et al.			
	BBBBBR	6,046,222	Antonucci et al.			
	CCCCCR	6,080,765	Ikeda et al.			
	DDDDDR	6,103,742	Ikeda et al.			
	EEEEER	6,107,323	Tamura et al.			
	FFFFFR	6,110,948	Momose et al.			
	GGGGGR	6,110,951	Pershad Singh et al.			
	HHHHHR	6,114,526	Lohray et al.			
	IIIIIR	6,117,893	Fujita et al.			
	JJJJJR	6,121,294	Ikeda et al.			
	KKKKKR	6,121,295	Ikeda et al.			
	LLLLLR	6,130,216	Antonucci et al.			
	MMMMMR	6,133,293	Ikeda et al.			
	NNNNNR	6,133,295	Ikeda et al.			
	OOOOR	6,331,633	Neogi et al.			
	PPPPR	6,245,814	Nag et al.			
	QQQQR	6,331,633	Neogi et al.			
	RRRRR	6,624,197	Nag et al.			

**FOREIGN PATENT DOCUMENTS**

Document Number	Date MM/YYYY	Country	Inventor Name	English Abstract	Translation Readily Available
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SSSSR					
TTTTTR					

**OTHER (Including in this order Author, Title, Periodical Name, Date, Pertinent Pages, etc.)**

UUUUR	Arakawa K, Inamasu M, Matsumoto M, Okumura K, Yasuda K, Akatsuka H, Kawanami S, Watanabe A, Homma K, Saiga Y, Ozeki M, Iijima I. Novel benzoxazole 2,4-thiazolidinediones as potent hypoglycemic agents. Synthesis and structure-activity relationships. Chem Pharm Bull (Tokyo). 1997 Dec;45(12):1984-93.				
VVVVR	Dow et al. "Benzylloxazolidine-2,4-diones as Potent Hypoglycemic Agents" J. Med. Chem. 1991 Vol. 34 1538-1544.				
WWWWW	Sohda et al. "Studies on Antidiabetic Agents. II. Synthesis of 5-[4-(1-Methylcyclohexylmethoxy)-benzyl]thiazolidine-2,4-dione (ADD-3878) and Its Derivatives" Chemical & Pharmaceutical Bulletin 30:10 (October 1982) pp. 3580-3600.				
XXXXR	Abstract - Gibbs et al. "The Benzylloxazolidinedione, CP-92768, is a Potent Antidiabetic Agent In Vivo and In Vitro" Diabetes 42 (Suppl. I) 1993 p. 207A.				

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